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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,540	01/16/2002	Gavriel J. Iddan	P-2752-US	1800

27130 7590 08/15/2003

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EXAMINER

FOREMAN, JONATHAN M

ART UNIT PAPER NUMBER

3736

DATE MAILED: 08/15/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,540

Applicant(s)

IDDAN, GAVRIEL J.

Examiner

Jonathan ML Foreman

Art Unit

3736

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38 and 39 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-18-37 and 40-42 is/are rejected.
- 7) ☒ Claim(s) 4 and 26 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 46.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

The information disclosure statements filed 10/31/02 and 2/12/02 comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609. The information disclosure statements have been placed in the application file, and the information referred to therein has been considered by the examiner as to the merits.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Line 3 of claim 19 recites "two interaction chambers". Then in lines 6 and 9, claim 19 recites "the interaction chamber". It is unclear which of the two interaction chambers are being referred to in lines 6 and 9.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 3736

2. Claims 1, 2, 7, 8, 15, 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,582,170 to Soller.

In reference to claims 1, 2, 7, 8, 15, 27 and 28 Soller discloses applicant's claimed invention (Figure 4) including at least one interaction chamber (7) for containing an in vivo sample, the interaction chamber having at least one indicator (Col. 8, lines 52 – 56) for reacting with the in vivo sample for generating optical changes in the interaction chamber; at least one illumination source (5) for illuminating the interaction chamber; and at least one optical detector (8) for detecting optical changes occurring in the interaction chamber. At least a portion of the interaction chamber is transparent in the wavelength of illumination (Col. 8, lines 45 – 49). The indicator is immobilized onto an appendage restricted to the interaction chamber. Since the indicator is dispersed throughout the appendage, some of the indicator is immobilized onto the chamber walls (Col. 8, lines 53 – 58). The system is designed for being inserted into a body lumen (See Abstract).

3. Claims 1 – 3, 5, 6, 9 – 18, 20 – 25, 27 – 31 and 40 – 42 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,498,941 to Jackson.

In reference to claims 1 – 3, 5, 6, 9 – 18, 21 – 25, 27 – 31 and 40 – 42, Jackson discloses applicant's claimed invention including at least one interaction chamber (80) for containing an in vivo sample/ endo-luminal sample, the interaction chamber having at least one indicator (Col. 6, lines 19 - 22) for reacting with the in vivo sample for generating optical changes in the interaction chamber; at least one illumination source (Col. 3, lines 28 - 36) for illuminating the interaction chamber; and at least one optical detector (Col. 3, lines 28 - 60) for detecting in vivo optical changes occurring in the interaction chamber. At least a portion of the interaction chamber is transparent in the wavelength of illumination (Col. 6, lines 26 - 30). Jackson discloses a plurality of interaction chambers having different indicators located therein (Col. 6, lines 33 – 36). The chamber has a

Art Unit: 3736

selectively permeable membrane (Col. 6, lines 25 – 27). Jackson discloses an imager for obtaining images of the interaction chamber. The imager disclosed by Jackson is of a type for producing video signals (Col. 2, lines 55 – 59). Images are transmitted by a transmitter to a receiving system for receiving video signals (Col. 3, lines 14 – 17). It is inherent that the computer system (26) disclosed by Jackson has a battery. The system is designed for being inserted into a body lumen. A recitation with respect to the manner in which an apparatus is intended to be employed does not impose any structural limitation upon the claimed apparatus that differentiates it from a prior art reference disclosing the structural limitations of the claim. *In re Pearson*, 494 F.2d 1399, 181 USPQ 641 (CCPA 1947); *In re Yanush*, 477 F.2d 958, 177 USPQ 705 (CCPA 1973); *In re Finsterwalder*, 436 F.2d 1028, 168 USPQ 530 (CCPA 1971); *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967); *In re Otto*, 312 F.2d 937, 136 USPQ 458 (CCPA 1963); *Ex parte Masham*, 2 USPQ2d 1647 (BbPatApp & Inter 1987).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 32 – 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,498,941 to Jackson in view of U.S. Patent No. 6,330,465 to Huyberechts et al.

In reference to claims 32 – 37, Jackson discloses a method for determining in vivo conditions including receiving a sample in an interaction chamber (80), the chamber having at least one indicator for reacting with the sample for generating optical changes in the chamber (Col. 6, lines 19 - 22); illuminating the interaction chamber; and detecting in vivo optical changes occurring

Art Unit: 3736

in the interaction chamber (Col. 3, lines 28 – 60). The optical detector is an imager of the type for producing video signals (Col. 2, lines 55 – 59). The video signals are transmitted to a receiving system (Col. 3, lines 14 – 17). Jackson discloses that the user decides what chemical or physical property is to be measured, then obtains the corresponding probe (Col. 3, lines 5 – 10). However, Jackson fails to disclose the sample being one from the GI tract. Huyberechts et al. discloses a gastro-intestinal probe having a sensitive material that is connected to an optical measurement means (Col. 2, lines 33 – 40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the apparatus and method as disclosed by Jackson to obtain and diagnose a sample from the GI tract as taught by Huyberechts et al. in order to measure the cumulative aggressive force that digestive secretions exert upon the mucosa and surrounding tissues of the digestive tract (Col. 2, lines 25 – 30).

Allowable Subject Matter

6. Claims 38 and 39 are allowed. No prior art teaches or fairly suggests applicant's claimed invention including a capsule for imaging the GI tract including a system having at least one interaction chamber for containing a sample from the GI tract, the interaction chamber having an indicator for reacting with the sample for generating optical changes in the chamber; an illumination source for illuminating the GI tract and the interaction chamber; an imager for imaging the GI tract and the interaction chamber and for producing video signals; and a transmitter for transmitting the video signals to a receiving system.

7. Claim 19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Art Unit: 3736

8. Claims 4 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,096,671 to Kane et al., U.S. Patent No. 5,368,027 to Lubbers et al., U.S. Patent No. 6,256,522 to Schultz and U.S. Patent Application Publication No. 2001/0051766 to Gazdzinski.

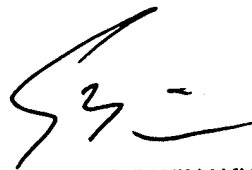
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan ML Foreman whose telephone number is (703)-305-5390. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max F Hindenburg can be reached on (703)308-3130. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-308-0758 for regular communications and (703)-308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-308-0858.



JMLF
August 11, 2003



ERIC F. WINAKUR
PRIMARY EXAMINER